

What you need to know about: Respiratory Syncytial Virus (RSV)

What is respiratory syncytial virus (RSV)? What does RSV cause?

RSV is a lung infection caused by a virus. Although it can affect anyone, RSV is generally considered as the most frequent cause of lower respiratory tract infections in infants and young children. Each year about 125,000 infants are hospitalized with RSV in the United States.

What are the symptoms of an RSV infection?

Many persons with RSV infection show no symptoms. In adults and children older than 3 years, RSV symptoms are usually those of a simple upper respiratory tract illness. The illness typically begins with a low-grade fever, runny nose, cough, and, sometimes, wheezing. In children younger than age 3, RSV can cause a lower respiratory tract illness, such as bronchiolitis or pneumonia, and more severe cases can result in respiratory failure. Symptoms may include a worsening croupy cough, unusually rapid breathing, difficulty breathing (the chest may suck in with each breath), and a bluish color of the lips or fingernails caused by low levels of oxygen in the blood.

RSV has also been found to be a frequent cause of middle ear infections (otitis media) in preschool children.

How common is RSV?

RSV infections occur all over the world, most often in outbreaks that can last up to 5 months, from late fall through early spring. RSV epidemics spread easily in households, daycare centers, and schools.

Who is likely to get RSV?

Most children are infected at least once by age 2 and continue to be reinfected throughout life. RSV is the most common cause of bronchiolitis and pneumonia in infants and children under the age of one. The majority of children hospitalized for an RSV infection are under the age of six months. The elderly and premature babies or those with lung or heart problems or with weak immune systems have an especially high risk. Those who are exposed to tobacco smoke, attend daycare, live in crowded conditions, or have school-aged siblings could also be at higher risk.

How is RSV spread?

Typically a parent, or more likely an older sibling, comes down with what seems like a bad cold first. The virus is found in discharges from the nose and throat of an infected person. People can get RSV infection by breathing in droplets after an infected person has coughed; by hand-to-mouth contact after touching an infected person; and, by hand-to-mouth after touching a surface that an infected person has touched or coughed on. The time period from exposure to illness is usually about 4 days. After an infection, a person may be still contagious for a week.

How can you prevent RSV?

Exercise typical cold precautions during the peak of RSV season.

- Wash your hands often. Do not touch your eyes, nose, or mouth without washing your hands first. Soap and water and disinfectants easily inactivate the virus.
- If possible, avoid exposure to sick persons. Parents with high-risk young infants should avoid crowds.
- When RSV infects a daycare center, it is not unusual to see most, if not all of the children come down with an RSV infection. Make sure that all children and employees use good handwashing techniques and that all children and employees cover their faces when coughing or sneezing. Used tissues should be thrown away in a lined trash can immediately after use.
- It is important that infants do not share toys, bottles, etc. Surfaces and toys shared by two or more children should be cleaned and disinfected regularly.
- Whenever a school-age child comes down with a cold, keep the child away from an infant brother or sister until the symptoms pass.

What do I do if I think anyone in my family has RSV?

Consult with your healthcare provider. Any breathing difficulties in an infant should be considered an emergency, so seek immediate help.

How are RSV infections diagnosed?

The diagnosis is usually made by the pattern of a child's symptoms (a clinical diagnosis), especially if he or she has a cold and is wheezing. RSV can be confirmed by checking for the virus in nasal washings or by growing the virus from nasal swabs.

How are RSV infections treated?

There is currently no vaccine to prevent RSV infection. Because RSV infection is often resolved on its own, treatment of mild symptoms is not necessary for most people. For babies and children who are at high risk of developing severe RSV, preventive medication is available. Parents of an infant who is premature, has a serious heart or lung disease, or has a weak immune system should contact their doctor or healthcare provider. Antibiotics are not useful in the treatment of RSV or any other viral disease.

Should I worry about RSV when I travel out of the country?

RSV is common worldwide, but no additional precautions are needed when traveling. The number of infections usually peaks in the late fall, winter, and early spring in the United States and Europe. In tropical climates, epidemics occur during the rainy season.